ANALOGOUS WITH HUMAN HAND, FINGER, OR ARM MOVEMENT  2	1	ADMICUTE WANTEN AMOD WOULD	22.63	.Vertical rack
## Motion of hand, finger, or arm member multiplied or reduced in its transmission to article manipulator means amaipulator means through an imperforate barrier for manipulator for manipulating means for transmit feedback signal from manipulating means for transmit feedback signal from manipulating means for transmission means for manipulating means for transmission means for manipulating means form for stock form manipulating means for manipulating means for manipulating means form for stock form manipulating means form for stock form for stock form for stock form for manipulating means for manipulating means form for stock f	1	ARTICLE MANIPULATOR MOVES		
Motion of hand, finger, or arm member multiplied or reduced in its transmission to article manipulator means  Baving means to transmit motion through an imperforate barrier 22.68With laterally guided pipe or rod support track provided price or rod supportOn inclined derrick mounted track trackBectric or fluid motor drive for manipulator from manipulator means to thand. finger, or arm 22.71Both upper and lower pipe or rod holding and guiding means feedback signal from manipulator means to hand. finger, or arm 24.6Both upper and lower pipe or rod holding and guiding means folked finger, or arm 24.6Both upper and lower pipe or rod holding and guiding means folked finger, or arm 24.6Both upper and lower pipe or rod holding and guiding means folked finger, or arm 25.6Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means folked finger, or arm 28.4Both upper and lower pipe or rod holding and guiding means 29.4Both upper and lower pipe or rod holding and guiding means 29.4Both upper and lower pipe or rod holding and guiding means 29.4Both upper and lower pipe or rod subject and track 29.5Both upper and lower pipe or rod subject and track 29.5Both upper and lower pipe or rod subject and track 29.5Both upper and lower pipe or rod subject and track 29.5Bot				
member multiplied or reduced in its transmission to article manipulator means  3	2	-	22.65	
in its transmission to article manipulator means 3	4			_
Manipulator means   22.68  With laterally guided pipe or rod support   rod support   rod support		-		
Having means to transmit motion through an imperforate barrier through and imperson to find the property of the proper				With laterally guided pipe or
through an imperforate barrier    Selectric or fluid motor drive for manipulator for manipulator   22.71   1.80th upper and lower pipe or rod holding and guiding means   24.80   24.51   24.5	3	-		
4 Electric or fluid motor drive for manipulator	3		22.69	
For manipulator   22.71  Both upper and lower pipe or rod holding and guiding means feedback signal from feedback signal from annipulator means to hand, finger, or arm   24.5   GLASS CYLINDERS   GLASS CYLINDERS   GLASS CYLINDERS   Finger, or arm   24.5   ROUND HAY BALE HANDLING  Drolling  Drolli	4			
Second State   Seco	_		22.71	Both upper and lower pipe or
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manipulator means to hand, finger, or arm (24.6 CLASS CYLINDERS finger, or arm (24.6 Unrolling Complexible motion (25.5 Unrolling Complexible Marketing Complexible Marke			23	
finger, or arm  1		_	24	GLASS CYLINDERS
Having flexible motion transmission means   26   TOBACCO STRINGERS OR UNSTRINGERS			24.5	ROUND HAY BALE HANDLING
Having flexible motion transmission means   26   TOBACCO STRINGERS OR UNSTRINGERS	6	For grip force amplification	24.6	.Unrolling
8	7		25	HAY DISTRIBUTORS
Shielding means  HUMAN BODY OPERATED EATING AID  A PAPARATUS FOR MOVING MATERIAL TO A POSITION IN THE ERECTION OR REPAIR OF A BUILDING  Boxlike wilding member manipulating means  Boxlike building module manipulating means  LAUNDRY HANDLING DEVICE  STOCK PULLING OR PUSHING  With means ejecting stock remannt  With additional diverse motion of stock  With fluid pressure actuated pushing or pulling means  Stock end face pushers  Pror sheet stock  Sheet stock lead end pullers  With with leading means  Shock end face pushers  With with slope change  Sheet stock lead end pullers  With slope change  Sheet promovertical drilling  With wellow and the receting apparatus and therebetween  With wellow and the receting stock through working, treating, or inspecting stack in located therebetween  With wellow and the receting stock through working treating, or inspecting station located therebetween  With wellow and the receting and action of the promover and the rebetween  With wellow and the receting stack and action and acting as discharge gate axis  Scoke and face pushers  With wellow and the receting stack and acting as discharge gate axis  With wellow and the receting and action and then upends it  Show and turns article about horizontal axis through working, treating, or inspecting station located therebetween  With wellow and the receting and action axis  With wellow and the receting and action and then upends it  Powered means (e.g., jogger, etc.)  Show privoting derrick  Show		transmission means	26	TOBACCO STRINGERS OR UNSTRINGERS
Shielding means  HUMAN BODY OPERATED EATING AID  A PAPARATUS FOR MOVING MATERIAL TO A POSITION IN THE ERECTION OR REPAIR OF A BUILDING  Boxlike wilding member manipulating means  Boxlike building module manipulating means  LAUNDRY HANDLING DEVICE  STOCK PULLING OR PUSHING  With means ejecting stock remannt  With additional diverse motion of stock  With fluid pressure actuated pushing or pulling means  Stock end face pushers  Pror sheet stock  Sheet stock lead end pullers  With with leading means  Shock end face pushers  With with slope change  Sheet stock lead end pullers  With slope change  Sheet promovertical drilling  With wellow and the receting apparatus and therebetween  With wellow and the receting stock through working, treating, or inspecting stack in located therebetween  With wellow and the receting stock through working treating, or inspecting station located therebetween  With wellow and the receting and action of the promover and the rebetween  With wellow and the receting stack and action and acting as discharge gate axis  Scoke and face pushers  With wellow and the receting stack and acting as discharge gate axis  With wellow and the receting and action and then upends it  Show and turns article about horizontal axis through working, treating, or inspecting station located therebetween  With wellow and the receting and action axis  With wellow and the receting and action and then upends it  Powered means (e.g., jogger, etc.)  Show privoting derrick  Show	8	.Having sealing or radiation	27	APPARATUS FOR STRINGING ARTICLES
9 HUMAN BODY OPERATED EATING AID 10 APPARATUS FOR MOVING MATERIAL TO 788 APPARATUS FOR MOVING AFORMOVING APOSITION IN THE ERECTION OR REPAIR OF A BUILDING 1. Flat wall or ceiling member manipulating means 788.1 Stack forming apparatus manipulating means 788.2 Stacking tapered or nestable articles 12 BOX LIKE building module 788.1 Stack forming apparatus manipulating means 788.2 Stacking tapered or nestable articles 13 LAUMDRY HANDLING DEVICE articles 14 STOCK PULLING OR PUSHING 788.3And varying orientation of tapered articles in stack remant 788.4Takes articles for stack from another group of stock 788.5And turns article about horizontal axis pushing or pulling means 788.6And turns plural articles as a unit about vertical axis 19For sheet stock 788.7And turns plural articles as a unit about vertical axis 19For sheet stock 788.7And turns plural articles as a unit about vertical axis 19For sheet stock 788.7And transports articles through working, treating, or inspecting station located therebetween 19For sheet stock 19Forms layered means vertically aligning stack being formed 19Forms layered means (e.g., jogger, etc.) 22.52Boom pivoting about horizontal 789And acting as discharge gate 19Powered means (e.g., jogger, etc.) 22.55Boom pivoting derrick 789.2Forms layered stack or row and then upends it 19Forms layered stack or row and 19Forms layered stack or				ON A SUPPORT IN ABUTTING
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REPAIR OF A BUILDING  11	10	APPARATUS FOR MOVING MATERIAL TO	788	APPARATUS FOR MOVING
Property LayerD, OR MUTUALLY STABILIZING ORDERLY GROUP		A POSITION IN THE ERECTION OR		INTERSUPPORTING ARTICLES INTO,
manipulating means  Boxlike building module manipulating means  788.1  LAUNDRY HANDLING DEVICE  14 STOCK PULLING OR PUSHING  With means ejecting stock remnant  6 With additional diverse motion of stock  788.5  With fluid pressure actuated pushing or pulling means  788.6  Stock end face pushers  Stock end face pushers  Sheet stock lead end pullers  WITH WEIGHING  MECHANISM  22.51  WELL PIPE OR ROD RACKING MECHANISM  22.52  With slope change  22.53  For nonvertical drilling  22.55  Boom pivoting about horizontal axis  789  And acting as discharge gate axis  And turns article about horizontal axis means  788.8  Including separate unstacking means  788.9  With means vertically aligning stack being formed  789  And acting as discharge gate axis  789.1  Powered means (e.g., jogger, etc.)  Guided skate or pusher  789.3  Tiers or layers formed and sequentially added to stack  Tiers or layers formed and sequentially added to stack  Tiers or layers formed and sequentially added to stack  Tiers or layers formed and		REPAIR OF A BUILDING		WITHIN, OR FROM FREESTANDING,
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STOCK PULLING OR PUSHING  STOCK PULLING OR PUSHING  With means ejecting stock remnant  Nuith additional diverse motion of stock  Pushing or pulling means  Stock end face pushers  Sheet stock lead end pullers  WITH WEIGHING  WELL PIPE OR ROD RACKING MECHANISM  Separate  MECHANISM  Signature  Mith slope change  Mith means vertically aligning stack being formed  Mith means wertically aligning stack being formed  Mith means (e.g., jogger, etc.)  Mith slope or rod guide  Mith slope or rod guide  Mith slope or rod guide  Mith means vertically aligning stack being formed  Mith means (e.g., jogger, etc.)  Mith means dix charge gate  Mith slope or rod guide  Mith means vertically aligning stack being formed  Mith slope or rod guide  Mith slope or rod guide  Mith means vertically aligning stack being formed  Mith slope or rod guide  Mith slope or stack from another group  Mariant sarticles as a unit about vertical axis  Mith slope or stack from another group  Mith slope or stack being formed  Mith slope or stack from another group  Mith slope or stack from another group  Mith slope or stack from a		manipulating means	788.2	Stacking tapered or nestable
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of stock  .With fluid pressure actuated pushing or pulling means  Respectively.  Note that the pushers of the pushers  Stock end face pusher		remnant	788.4	Takes articles for stack from
17 With fluid pressure actuated pushing or pulling means 788.6And turns plural articles as a unit about vertical axis  18 .Stock end face pushers unit about vertical axis  19For sheet stock 788.7And transports articles  20 .Sheet stock lead end pullers through working, treating, or inspecting station located therebetween  21 WITH WEIGHING inspecting station located therebetween  22.51 WELL PIPE OR ROD RACKING therebetween  MECHANISM 788.8Including separate unstacking means  22.52For nonvertical drilling 788.9With means vertically aligning stack being formed  22.53Boom pivoting about horizontal axis 1989.1Powered means (e.g., jogger, etc.)  22.56Pivoting derrick 1989.2Forms layered stack or row and then upends it 1989.3Tiers or layers formed and sequentially added to stack prior to upending	16	.With additional diverse motion		another group
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For sheet stock  20		pushing or pulling means	788.6	-
20 .Sheet stock lead end pullers 21 WITH WEIGHING 22.51 WELL PIPE OR ROD RACKING	18	.Stock end face pushers		
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22.57Guided skate or pusher 22.58Pipe or rod guide 22.59Guided skate or pusher 22.61Pipe or rod guide  789.2Forms layered stack or row and then upends itTiers or layers formed and sequentially added to stack		axis	789.I	
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22.61Pipe or rod guide sequentially added to stack	22.58	Pipe or rod guide	E00 0	
22.01ripe of four guide	22.59	Guided skate or pusher	789.3	
22.62 .Horizontal rack prior to upending	22.61	Pipe or rod guide		
	22.62	.Horizontal rack		prior to upending

789.4	Includes means for crossing articles in layer	791.8	Leaves void between articles in layer
789.5	Inserts separator into stack	791.9	To facilitate insertion of
789.6	Plural article sources		handling means
789.7	Includes means on or linked with transporting vehicle for	792	Crosses articles in adjacent layers
	forming and discharging stack	792.1	Includes swingable pusher for
789.8	Creates single stack by juxtaposing separately formed		turning article shoved to layer
	tiers	792.2	With rotating stack support
789.9	With means for removing completed stack from stacking	792.3	Rotated between addition of completed layers
	location	792.4	Turns completed layer about
790	Interfingers with stack		vertical axis before stacking
	support moving vertically	792.5	Offsets articles within
790.1	relative to removing meansArticles received and stack	722.3	parallel adjacent superposed
790.1			rows
	discharged at interfingering	792.6	Adds rows of articles to layer
790.2	locationIncludes stack gripping device	792.7	Positions lowest article of stack first
790.3	Pusher	792.8	Includes horizontally
790.4	Includes carrier having		shiftable, article elevating
	distinct supports each		device
	successively receiving a stack	792.9	With article gripping means
	thereon	793	Includes suction-type article
790.5	Includes gravity unloaded		gripping means
	movable support	793.1	And endless belt for
790.6	And conveyor for receiving	,,,,,,	transporting
	unloaded stack	793.2	Includes magnetic-type article
790.7	Includes driven conveyor		gripping means
	whereon continuously supported	793.3	And endless belt for
	stack is formed	,,,,,,	transporting
790.8	With temporary support for	793.4	Includes support vertically
	incoming articles during		alignable with stack then
	discharge of stack		shiftable from beneath article
790.9	Stacks articles on different	793.5	Support carried or formed by
	supports		endless belt conveyor
791	And combines into single stack	793.6	With belt and article moving
791.1	Includes conveyor for feeding		vertically together above
	articles to sequentially		discharge
	formed stacks	793.7	And additional noncoaxial
791.2	Offsets or crosses adjacent		endless belt coacting
	articles in single article		therewith to support article
	wide stack		above discharge
791.3	Articles inverted in adjacent	793.8	Support adjusts vertically as
	levels or layers		height of stack increases
791.4	Layers	793.9	Support revolves around
791.5	Formed with sloped or stepped		central axis during shifting
	side		and return
791.6	Sequentially forms or adds	794	Support swings during
	completed layers	- <del>-</del>	shifting and return
791.7	Offsets circular articles	794.1	Support travels vertically
	within adjacent rows of layer		spaced paths during shifting
	2		and return

794.2	Plural coacting supports shifting in opposite	796.9	Includes article gripping device
	directions	797	By suction
794.3	And movable stop engaging	797.1	By magnetic force
	article during shifting of support	797.2	Includes endless belt article separator
794.4	Includes endless belt for	797.3	Includes rotary article
	delivering		separator
794.5	Having discharge vertically	797.4	Removes lowest article first
	shiftable		from stack
794.6	Having discharge vertically shiftable as stack grows	797.5	Includes means for elevating remainder of stack therefrom
794.7	Includes pusher conveyor for delivering	797.6	Includes endless belt article separator
794.8	Includes roller conveyor for	797.7	Includes rotary article
	delivering		separator
794.9	Positions highest article of stack first	797.8	Includes article separator with gripping device
795	Includes rotary deliverer	797.9	Includes pusher article
795.1	Coacting screws		separator
795.2	Includes means for raising	798	Includes movable stack support
	highest article and lowering		for gravity unloading article
	it upon newly delivered	798.1	And means for temporarily
	article		holding remainder of stack
795.3	Includes means raising article	798.2	.Positions intersupporting
	up to stack		article into row
795.4	.Unstacking apparatus	798.3	Takes article therefor from
795.5	Utilizes fluid blast to remove		another spaced group
705 6	article	798.4	Tapered or nestable articles
795.6	Unstacking tapered or nestable		positioned
795.7	articles	798.5	Includes revolving or swinging
195.1	With means vertically aligning stack	700 6	handler
795.8	With means replacing depleted	798.6	And pusher conveyor for delivering
755.0	stack	798.7	3
795.9	Removes complete tier from	190.1	Includes pusher conveyor for delivering
,,,,,,	multitier stack	798.8	Includes nonpowered guide for
796	Separates stack into smaller	790.0	delivering
	stacks	798.9	.Removes intersupporting article
796.1	Removes smaller stack from	750.5	from row
	bottom	111	VEHICLE-CARRIED BALE ACCUMULATOR
796.2	Removes layer as unit	132	HAY STACK SHAPERS
796.3	And changes position or	133	COAL STORAGE TYPE
	orientation of articles within	137.1	MARINE LOADING OR UNLOADING
	layer		SYSTEM
796.4	With means for reorienting	137.2	.Loading or unloading aircraft
	article after unstacking		under marine conditions
796.5	Removes highest article first	137.3	Underwater loading or unloading
	from stack	137.4	.With weather cover
796.6	With means offsetting highest	137.5	.Marine vessel to/from well
	article prior to removal	137.6	.Marine vessel to/from air vessel
796.7	With stack elevating means	137.7	.Marine vessel to/from water
796.8	Pusher separates article from	137.8	Marine vessel to/from lighter
	stack after elevation		to/from water
		137.9	.Marine vessel to marine vessel

138.1	With means to effect relative	141.4	Having swinging portion
	vertical movement of marine	141.5	On marine vessel
138.2	vesselWith means to compensate for	141.6 141.7	By use of swinging crane
130.2	relative marine vessel	141.7	By use of hoist lineBy use of conveyor chute
	movement	141.9	.By use of conveyor chute .By use of screw conveyor on
138.3	Including means to sense	141.9	marine vessel
	position of marine vessel	142.1	.By use of endless belt conveyor
138.4	Line tension control	112.1	on marine vessel
138.5	Marine vessel to/from lighter	142.2	For "bulk" (e.g., granular,
	to/from marine vessel		etc.) cargo
138.6	By use of endless belt	142.3	Belt extending parallel to
	conveyor		marine vessel beneath cargo
138.7	Marine vessel to/from lighter		hold
	to/from shore	142.4	Sequential endless belts
138.8	With marine vessel holding or	142.5	Including orbiting bucket
120.0	moving device	142.6	.By use of laterally moving crane
138.9	Serial marine vessels		on marine vessel
139.1	supporting conveyor	142.7	.By use of swinging crane on
139.1	By use of endless belt	140.0	marine vessel
139.2	conveyorOne marine vessel towing the	142.8 142.9	.By use of hoist line
139.2	other	142.9	Scoop or scraper on marine vessel
139.3	By use of endless belt conveyor	143.1	.By use of conveyor chute
139.4	.Marine vessel to/from shore	143.2	.Stowage arrangement on marine
139.5	Personnel loading or unloading	113.2	vessel
139.6	With means to compensate for	146	CHARGING OR DISCHARGING MEANS
	marine vessel movement		ADAPTED FOR USE IN A
139.7	marine vessel movementIncluding means to sense		ADAPTED FOR USE IN A RADIOACTIVE ENVIRONMENT
139.7	Including means to sense vertical position of marine	147	
	Including means to sense vertical position of marine vessel (e.g., draft, etc.)	147	RADIOACTIVE ENVIRONMENT
139.7 139.8	<pre>Including means to sense   vertical position of marine   vessel (e.g., draft, etc.)With marine vessel holding or</pre>	147	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A
139.8	<ul><li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li><li>With marine vessel holding or moving device</li></ul>		RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR
	<ul><li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li><li>With marine vessel holding or moving device</li><li>Marine vessel to/from land or</li></ul>	148	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal
139.8	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from</li> </ul>	148 149	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber
139.8 139.9	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> </ul>	148	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or
139.8	<pre>Including means to sense   vertical position of marine   vessel (e.g., draft, etc.)With marine vessel holding or   moving deviceMarine vessel to/from land or   rail vehicle distinct from   systemBy use of marine vessel to/</pre>	148 149	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or
139.8 139.9	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or</li> </ul>	148 149	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within,
139.8 139.9 140.1	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/ from shore gangway for land or rail vessel</li> </ul>	148 149 150	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamber
139.8 139.9	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or</li> </ul>	148 149 150	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within,
139.8 139.9 140.1	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or rail vessel</li> <li>By use of endless belt</li> </ul>	148 149 150	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous path
139.8 139.9 140.1	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or rail vessel</li> <li>By use of endless belt conveyor</li> </ul>	148 149 150	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber
139.8 139.9 140.1	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or rail vessel</li> <li>By use of endless belt conveyor</li> <li>By use of laterally moving</li> </ul>	148 149 150	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to,
139.8 139.9 140.1 140.2 140.3	Including means to sense vertical position of marine vessel (e.g., draft, etc.)With marine vessel holding or moving deviceMarine vessel to/from land or rail vehicle distinct from systemBy use of marine vessel to/ from shore gangway for land or rail vesselBy use of endless belt conveyorBy use of laterally moving crane	148 149 150 151 152	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to, or from, device or path
139.8 139.9 140.1 140.2 140.3 140.4	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/from shore gangway for land or rail vessel</li> <li>By use of endless belt conveyor</li> <li>By use of laterally moving crane</li> <li>By use of swinging crane</li> </ul>	148 149 150 151 152	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to, or from, device or pathWith driven means within
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139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6	Including means to sense vertical position of marine vessel (e.g., draft, etc.)With marine vessel holding or moving deviceMarine vessel to/from land or rail vehicle distinct from systemBy use of marine vessel to/ from shore gangway for land or rail vesselBy use of endless belt conveyorBy use of laterally moving craneBy use of swinging craneBy use of conveyor chuteBy lifting marine vessel or by changing water levelBy use of screw conveyor	148 149 150 151 152 153	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to, or from, device or pathWith driven means within chamber to manipulate or transfer materialIncluding track-guided, wheeled vehicle
139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/ from shore gangway for land or rail vessel</li> <li>By use of endless belt conveyor</li> <li>By use of laterally moving crane</li> <li>By use of swinging crane</li> <li>By use of conveyor chute</li> <li>By lifting marine vessel or by changing water level</li> <li>By use of screw conveyor</li> <li>By use of endless belt conveyor</li> </ul>	148 149 150 151 152	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to, or from, device or pathWith driven means within chamber to manipulate or transfer materialIncluding track-guided, wheeled vehicleHaving means to support
139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6	Including means to sense vertical position of marine vessel (e.g., draft, etc.)With marine vessel holding or moving deviceMarine vessel to/from land or rail vehicle distinct from systemBy use of marine vessel to/ from shore gangway for land or rail vesselBy use of endless belt conveyorBy use of laterally moving craneBy use of swinging craneBy use of conveyor chuteBy lifting marine vessel or by changing water levelBy use of screw conveyorBy use of endless belt conveyorBy use of endless belt conveyorFor "bulk" (e.g., granular,	148 149 150 151 152 153 154 155	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A HEATING FUNCTION AND MATERIAL CHARGING OR DISCHARGING MEANS THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or inclined flow path to carry or convey material into, within, and out of chamberIn helical or tortuous pathWith means outside of chamber to carry or guide material to, or from, device or pathWith driven means within chamber to manipulate or transfer materialIncluding track-guided, wheeled vehicleHaving means to support material suspended therebelow
139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6 140.7 140.8 140.9	<ul> <li>Including means to sense vertical position of marine vessel (e.g., draft, etc.)</li> <li>With marine vessel holding or moving device</li> <li>Marine vessel to/from land or rail vehicle distinct from system</li> <li>By use of marine vessel to/ from shore gangway for land or rail vessel</li> <li>By use of endless belt conveyor</li> <li>By use of laterally moving crane</li> <li>By use of swinging crane</li> <li>By use of conveyor chute</li> <li>By lifting marine vessel or by changing water level</li> <li>By use of screw conveyor</li> <li>By use of endless belt conveyor</li> <li>By use of endless belt conveyor</li> <li>By use of endless belt conveyor</li> <li>For "bulk" (e.g., granular, etc.) cargo</li> </ul>	148 149 150 151 152 153	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A    HEATING FUNCTION AND MATERIAL    CHARGING OR DISCHARGING MEANS    THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or    inclined flow path to carry or    convey material into, within,    and out of chamber .In helical or tortuous path .With means outside of chamber    to carry or guide material to,    or from, device or path .With driven means within    chamber to manipulate or    transfer material .Including track-guided, wheeled    vehicleHaving means to support    material suspended therebelowIncluding reciprocating or
139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6 140.7 140.8 140.9 141.1	Including means to sense vertical position of marine vessel (e.g., draft, etc.)With marine vessel holding or moving deviceMarine vessel to/from land or rail vehicle distinct from systemBy use of marine vessel to/ from shore gangway for land or rail vesselBy use of endless belt conveyorBy use of laterally moving craneBy use of swinging craneBy use of conveyor chuteBy lifting marine vessel or by changing water levelBy use of screw conveyorBy use of endless belt conveyorBy use of endless belt conveyorFor "bulk" (e.g., granular, etc.) cargoIncluding orbiting bucket	148 149 150 151 152 153 154 155 156	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A    HEATING FUNCTION AND MATERIAL    CHARGING OR DISCHARGING MEANS    THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or    inclined flow path to carry or    convey material into, within,    and out of chamberIn helical or tortuous pathWith means outside of chamber    to carry or guide material to,    or from, device or pathWith driven means within    chamber to manipulate or    transfer materialIncluding track-guided, wheeled    vehicleHaving means to support    material suspended therebelowIncluding reciprocating or    vibratory conveyor
139.8 139.9 140.1 140.2 140.3 140.4 140.5 140.6 140.7 140.8 140.9 141.1 141.2	<pre>Including means to sense   vertical position of marine   vessel (e.g., draft, etc.)With marine vessel holding or   moving deviceMarine vessel to/from land or   rail vehicle distinct from   systemBy use of marine vessel to/   from shore gangway for land or   rail vesselBy use of endless belt   conveyorBy use of laterally moving   craneBy use of swinging craneBy use of conveyor chuteBy lifting marine vessel or by   changing water levelBy use of screw conveyorBy use of endless belt conveyorFor "bulk" (e.g., granular,   etc.) cargoIncluding orbiting bucketWith grab bucket</pre>	148 149 150 151 152 153 154 155	RADIOACTIVE ENVIRONMENT CHAMBER OF A TYPE UTILIZED FOR A    HEATING FUNCTION AND MATERIAL    CHARGING OR DISCHARGING MEANS    THEREFOR .With alarm, indicator, or signal .Driven, rotatable chamber .Including driven device and/or    inclined flow path to carry or    convey material into, within,    and out of chamberIn helical or tortuous pathWith means outside of chamber    to carry or guide material to,    or from, device or pathWith driven means within    chamber to manipulate or    transfer materialIncluding track-guided, wheeled    vehicleHaving means to support    material suspended therebelowIncluding reciprocating or    vibratory conveyorIncluding endless conveyor
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158	Including screw, rotary, or rotating pusher, conveyor	180	Including apparatus to advance a material-supporting element
159	Including roller conveyor		to a point within chamber,
160	.Charging of chamber		release material, and retract
			element
161	With control system responsive to condition in chamber	181	With driven means to eject
162	Through plural ports in top of		material from element
	chamber	182	Element comprises tiltable,
163	From vehicle-carried hopper		material-underlying support
103	located above port	183	Receptacle separable from
1.6.4	_	103	apparatus (e.g., for
164	With closures for ports and		
	means on vehicle to manipulate		refilling, etc.)
	them	184	Receptacle tiltable about
165	By depositing material onto		axis parallel to direction of
	surface of glass melt		apparatus advance
166	With pushing device to move	185	Element comprises receptacle
100	material therealong		having bottom outlet
1.60		186	Element comprises grab
167	By driven device for		
	transporting material to a	187	Material accumulating and
	stationary, at least in part,		holding structure, and driven
	accumulating means for		conveyor therein serving to
	subsequent release into		move (e.g., eject, etc.)
	chamber by gravity		material from structure to
168	Receptacle moved back and		chamber
100	forth along inclined way	188	Including wheeled carriage
			for supporting the structure
1.60	(e.g., skip, etc.)	189	
169	Accumulating means includes	109	Driven conveyor comprises
	serially arranged closures	100	rotatable, pocketed gate
170	Each comprising bell of bell	190	Screw conveyor
	and hopper type accumulating	191	Traversing hoist having
	means		material-underlying support or
171	Conveyor		material attracting or
172	By driven device for		gripping means
	transporting material to and/	192	Carrier-mounted, tiltable
			receptacle
	or into, or into and within,	193	Thrower
	chamber		
173	Plural, successive, driven	194	Reciprocating or oscillating
	devices	195	Rotary
174	Thrower and at least one	196	Conveyor
	feeder conveyor therefor	197	Screw
175	Including screw conveyor	198	Reciprocating pusher or
176	Including pusher conveyor		reciprocating conveying
177			surface
1//	Two or more conveyors, one	100	
	traversing open top, or	199	By material supporting
	opening in top of, chamber		structure movable, or having a
178	Receptacle moved back and		movable component, to release
	forth along inclined way		material into chamber by
	(e.g., skip, etc.)		gravity
179	Movably mounted conveyor	200	Including serially arranged
	traverses open top, or opening		closures
	in top of, chamber	201	At least one comprising bell
	III cop of, chamber	201	of bell and hopper type
			supporting structure
		202	
		202	With means to improve seal
			between mating surfaces

203	Having bell and/or hopper mounted for rotation	222.01	APPARATUS FOR CHARGING A LOAD HOLDING OR SUPPORTING ELEMENT
204 205	Bell and hopperWith means to distribute material after release from structure		FROM A SOURCE, AND MEANS FOR TRANSPORTING AND PRESENTING ELEMENT TO A WORKING, TREATING, OR INSPECTING
206	With means to distribute		STATION
	material after release from	222.02	.Condition responsive control of
	structure		transporting means
207	Comprising a tiltable material containing member	222.03	.Portion of transporting means is retarded or stopped with load
208	By inclined flow path		at station without being
209	.Discharging of chamber by driven device	000 04	disconnected from remainder of transporting means
210	With means beyond chamber exit to move or guide material discharged therefrom by the device	222.04	.Device engages load handling or supporting element or load on element to align load at station
211	Means comprises endless or rotary conveyor	222.05	Device engages load holding or supporting element to fix
212	Means comprises portable (e.g., vehicle mounted, etc.)		element position relative to station
	material receiving chute	222.06	Device engages portion of
213	Device comprises screw conveyor		element which is separable
214	Device comprises pushing or		from transporting means to fix
	pulling mechanism	222.07	position of portion of element
215	Mechanism repositionable for serving plural chambers	222.07	.Means to convey load back and forth between initial location
216	.Discharging of chamber by	222 00	and station
	gravity, and means beyond exit	222.08	.Charging transporting means with load at station
	thereof to guide, move, or	222.09	.With simultaneous charging and
	stop material	222.09	discharging of plural load
217	APPARATUS FOR MOVING MATERIAL		holding or supporting elements
	BETWEEN ZONES HAVING DIFFERENT	222.1	With pusher
	PRESSURES AND INHIBITING CHANGE IN PRESSURE GRADIENT	222.11	With conveyor
	THEREBETWEEN	222.12	With reciprocating arm
217.1	.For carrying Standarized	222.13	.Transporting means carries load
217.1	Mechanical Interface (SMIF) type		to at least one of a plurality of fixed stations
218	.Including screw conveyor	223.01	.Supply source capable of 360
219	.Including trap chamber having		degrees revolution
	horizontal axis of rotation	223.02	.Supply source capable of
220	With means for changing		reversible 180 degrees
	pressure in trap chamber		revolution
221	.Including serially arranged	224.01	.Supply source includes chute
	valves in path having a	225.01	.Load holding or supporting
	vertical component (e.g.,		element including gripping
	airlocks, etc.)	226.01	means
			Plural grippers for plural elements
		226.02	Gripper includes pivoted jaw
		226.03	.Including plurality of supply sources for single element

226.04	.Device engaging transporting means or source to align	239	One or more separate supporting members and means
226.05	element relative to source .Transporting means is a horizontally rotated arm		<pre>to impart independent, linear or partly linear, movement thereto</pre>
227	APPARATUS PARTICULARLY ADAPTED FOR CHARGING OR DISCHARGING A FACILITY COMPRISING ONE OR MORE SITES FOR THE PARKING OF	240	<pre>Member moving from particular location to discharge and/or receive vehicle, and returning thereto</pre>
	WHEELED VEHICLES	241	With means to transfer vehicle
228	<pre>.Facility includes structure   (e.g., ramp, angularly related   successive locations for a</pre>	242	<pre>to or from supporting memberOn driven, plural-site carrier initially receiving vehicle</pre>
	<pre>vehicle, etc.) necessitating self-propellability or steerability of vehicle</pre>	243	With loading means, external to carrier, at facility entrance
229	Upwardly inclined, pivotable parking site for receiving driven vehicle	244	Serving also movable site on subsequent driven carrier, or fixed site
230	Caused to pivot by advancing vehicle	245	By moving linearly in a horizontal direction
231	.With control system responsive to changeable operating instructions	246	<pre>And moving vertically (e.g.,   laterally shiftable elevator,   etc.)</pre>
232	.With means to sense condition of site	247	By moving linearly in vertical direction or orbiting
233	.Including one or more movable sites	248	<pre>in vertical planeEndless carrier having sites</pre>
234	Vehicle assigned to particular supporting member (e.g.,	0.40	attached thereto (e.g., suspended therefrom, etc.)
	<pre>platform, dolly, cage, etc.) having some degree of independence either as to</pre>	249	<pre>Moving linearly in vertical   direction or orbiting in   vertical plane</pre>
	<pre>means, time, or direction of movement</pre>	250	<pre>Revolving about single, horizontal axis</pre>
235	<pre>Supporting member separable from endless, member- transporting carrier, or</pre>	251	<pre>Endless carrier having sites   attached thereto (e.g.,   suspended therefrom, etc.)</pre>
	disengageable from endless drive means, and movable away therefrom for receiving, discharging, or storing vehicle	252	.With vehicle storage or retrieval system responsive to manual designation of destination
236	Plurality of supporting members moved in recirculating fashion by succession of	253	<pre>.With means to transfer, or facilitate transfer of, vehicle from carrier to site or vice versa</pre>
000	driving devices	254	Including sets of intermeshing
237	Path of moving member describes generally rectangular loop		support elements having relative vertical movement
238	Successive devices each	255	By exerting upward, in addition to generally horizontal, force
	<pre>include endless, member- driving element (e.g., belt, cable, chain, etc.)</pre>	256	And forming sole support for vehicle
	cabic, chain, ecc.,	257	Complementary, driven, vehicle- supporting conveyors on carrier and site

258	Tiltable or inclined means for supporting vehicle on carrier or site	275	With means to detect obstruction and alter movement of charging or discharging
259	By exerting generally	276	means
260	horizontal forceComprising component of carrier having both horizontal and vertical paths of travel	277	<ul><li>Inclined members</li><li>Charging or discharging means includes load sustaining surface and device to transfer</li></ul>
261	.Carrier-facility-site relationship		load, with horizontal component of movement, from or
262	Route to site utilizes plural carriers	278	to surface or memberDevice comprises one or more
263	Sites arranged radially of carrier rotatable in whole or		conveyors of driven roller or endless apron type
264	in partSites arranged in superposed,	279	<pre>Device includes self-powered, track-guided car</pre>
	longitudinal rows and in confronting relationship to	280	Device includes push-pull mechanism
265	carrier in intervening aisle GUIDED, WHEELED DEVICE FOR TRANSPORTING MAIL AND EXTERNAL	281	Charging or discharging means includes elevating device, movable in horizontal
	MEANS COOPERATING THEREWITH FOR LOADING OR UNLOADING THE DEVICE		direction (e.g., portable, etc.), having load-sustaining surface
266	PLURAL, STATIC STRUCTURES FOR SUPPORTING DISCRETE LOADS AND CHARGING OR DISCHARGING MEANS	282	Including additional means to move surface horizontally relative to devicePivotably or rotatably
067	THEREFOR		
267	<pre>.Load-underlying members (e.g.,   racks, receptacles (or a   compartmented receptacle),   shelves, troughs, etc.)</pre>	284	With detachably associated auxiliary carrier for transporting device during portion of its horizontal
268	With means for selectively		travel
	<pre>charging a plurality of receptacles from a single source, or selectively discharging a plurality of</pre>	285	Charging or discharging means comprises plural endless conveyors or plural runs of single endless conveyor
	receptacles to a single	286	With load-supporting pallet
	destination	287	STATIC RECEPTACLE OF A MATERIAL
269	Charging a plurality of receptacles		CONDITIONING TYPE AND MEANS TO MOVE, OR FACILITATE MOVEMENT
270	Condition responsive		OF, MATERIAL TO, WITHIN, OR
271	By driven conveyor having gated discharging locations spaced therealong	288	FROM THE RECEPTACLE STATIC RECEPTACLE AND MEANS FOR CHARGING OR DISCHARGING, OR
272	By conveyor movable (e.g., pivotable, etc.) to reposition	289	FACILITATING THE CHARGING OR DISCHARGING OF, THE RECEPTACLE
273	<pre>outlet thereofWith control system responsive   to changeable operating   instructions</pre>	290	<pre>.With alarm, indicator, or signal .Receptacle contains liquid in   which charge is submergibly   sealed</pre>
274	With means on charging or discharging means to determine status of member	291	.With means to handle (e.g., recirculate, remove, etc.) dust

charging or discharging means means charging or discharging means means seams and seams controlled by level of material in receptacle of material during charging charging charging comprises gravity flow path (e.g., chute, etc.)  309	292	.With means to seal receptacle in vicinity of entrance for	313	Having compound motion assistant operating on top of
Charging or charge-distributing means means   315  Condition responsive   316  To maintain material surface   horizontal  To material   discharge				
meansCondition responsivePosition of charging means controlled by level of material in receptacleDrive means of charging conveyor controlled by level of material in receptacleDrive means of charging conveyor controlled by level of material in receptacleDrive means of charging conveyor controlled by level of material in receptacleDrive means of chargingDrive means of chargingDrive means to ream or cut, or with collapsible means to form, vertical discharge passage in material during passage in material during chargingDrive mans to ream or cut, or with collapsible means to form, vertical dischargeDrive means to ream or cut, or with collapsible means to form, vertical dischargeDrive means to receptacleDrive means to receptacleDrive means to ream or cut, or with collapsible means to form, vertical dischargeDrive means to receptacleDrive means to receptacleDrive means to ream or cut, or with collapsible means to receptacleDrive meansDrive means to receptacleDrive meansDrive meansDrive meansDrive meansDrive meansDriveDrive meansDrive .	293		314	Including wall cleaning means
295Condition responsive controlled by level of material in receptacle controlled by level of material in receptacle controlled by level of material in receptacle conveyor controlled by level of material conveyor extending to discharge opening in sidewall of receptacle conveyor co			315	
controlled by level of material in receptacle 296	294	Condition responsive	316	
controlled by level of material in receptacle brive means of charging conveyor controlled by level of material in receptacle of material in receptacle of material in receptacle and mith collapsible means to ream or cut, or with collapsible means to form, vertical discharge passage in material during charging passage in material during charging  298	295	Position of charging means		horizontal
material in receptacle  Drive means of charging  Drive means to ream or cut, or with collapsible means to   form, vertical discharge   material during  Drive means of charging  Drive means  D			317	Route of material being
conveyor controlled by Level of material in receptacle  297				discharged includes vertical
conveyor controlled by level of material in receptacle 318With conveyor extending to discharge opening in sidewall of corn, vertical discharge 319Including plural screw elements comprises gravity flow path (e.g., chute, etc.) and conveyor such and pluring assistant involves driven type assistant and member for shielding its fixed end such assistant and member for shielding its fixed end such are supporting elements for conveyor shielding its fixed end such are supporting elements for conveyor shielding its fixed end such are supporting elements on conveyor shielding its fixed end such are supporting element for element supporting element supp	296	Drive means of charging		segment through remainder of
297 with means to ream or cut, or with collapsible means to form, vertical discharge passage in material during charging charging comprises gravity flow path (e.g., chute, etc.)  300Favminal portion of means comprises gravity flow path (e.g., chute, etc.)  301Rotary type 324Manning means of driven type 325Manning means of driven type 326Manning means of driven type 327Manning one or more conveyors rotatable about a vertical axis at an end thereof 10ad carrier 326At least one of screw type 327At least one of screw type 328At least one of screw type 329At least one of screw type 329At least one of endless type 331.01At least one of endless type 331.01At least one of endless type 331.01Condition responsive 331.01At least one of endless type 331.02At least one of endless type 331.03Charging or discharging means 331.04Charging or discharging		conveyor controlled by level		
with collapsible means to form, vertical discharge passage in material during charging 200Including plural screw elements  298Serving also to discharge receptacle comprises gravity flow path (e.g., chute, etc.)  300Having charge distributing means of driven type 201		of material in receptacle	318	With conveyor extending to
form, vertical discharge passage in material during charging selements elements elements receptacle receptacle comprises gravity flow path (e.g., chute, etc.) and comprises gravity flow from a portable load carrier axis at an end thereof gravity flow from a portable load carrier axis at an end thereof gravity flow from a portable load carrier axis at an end thereof axis at an end thereof gravity discharging means axis flow from a portable load carrier axis at an end thereof gravity discharging means axis at an end thereof axis at an end thereof gravity discharging means axis at an end thereof axis at an end thereof gravity flow from a portable load carrier axis at an end thereof gravity discharging means axis at an end thereof gravity discharging means axis at an end thereof gravity discharging means axis at an end thereof gravity discharging gravity flow from a portable load carrier axis at an end thereof gravity discharging gravity flow from a portable load carrier axis at an end thereof gravity discharging means axis at an end thereof gravity discharging gravity flow from a portable load carrier axis at an end thereof gravity discharging gravity flow from a portable load carrier axis at an end thereof gravity discharging gravity flow from a portable load carrier axis at an end thereof gravity flow from a portable load carrier axis at an end thereof gravity flow from a portable gravity flow from a portable gravity flow from a portable gravity flow	297	With means to ream or cut, or		discharge opening in sidewall
passage in material during charging elements  298		with collapsible means to		of receptacle
charging elements  Serving also to discharge receptacle   321		form, vertical discharge	319	Screw-type pickup conveyor
298Serving also to discharge receptacle 299Terminal portion of means comprises gravity flow path (e.g., chute, etc.) 300Having charge distributing means of driven type 323Condition responsive rotatable about a vertical axis at an end thereof 303Charging a static receptacle by gravity flow from a portable load carrier 326Including at least one discharge assistant located proximate to bottom of receptacle and displaceable generally parallel thereto 306Assistant separable from receptacle assistant and member for shielding its fixed end acsistant involves driven, wheel-like, support member rolling on surface of material assistant involves driven, wheel-like, support member rolling on surface of materialCondition responsive rolling on surface of materialCondition responsiveIncluding one or more driven conveyors located within or partly within receptacle for making initial pickup of materialAt least one of screw typeAt least one of screw typeAt least one of endless typeAt least one of endless typeGravity discharge of a gated, static receptacle to one or more vehicle-mounted receiversLocated on moving vehicleLocated onLocated onL		passage in material during	320	Including plural screw
receptacle  299		charging		elements
299Terminal portion of means comprises gravity flow path (e.g., chute, etc.)  300Having charge distributing means of driven type  301Rotary type  302Having one or more conveyors rotatable about a vertical axis at an end thereof  303Charging a static receptacle by gravity flow from a portable load carrier  304 .Nongravity discharging means  305Including at least one discharge assistant of the compound motion ype  306Having compound motion  307Condition responsive  328Including lail  329At least one of screw type  328At least one of screw type  331.01Condition responsive  329At least one of screw type  331.01At least one of screw type  331.01At least one of endless type  331.02Charging ompound motion assistant located proximate to bottom of receptacle and displaceable generally parallel thereto  331.03Assistant separable from shielding its fixed end  331.04Comprising screw conveyor  331.05Including means for loosening packed material  331.06Laving receptacle-reacting element of displaceable movement drive means located on conveyor discharging or discharging or discharging or discharging means	298	Serving also to discharge	321	Including means for
comprises gravity flow path (e.g., chute, etc.)  300		receptacle		loosening packed material
(e.g., chute, etc.)  300	299	<u>-</u>	322	Means for displacing
300Having charge distributing means of driven type 323Condition responsive 324Including flail 326Having one or more conveyors 325Including one or more driven conveyors located within or partly within receptacle for making initial pickup of material load carrier 326At least one of screw type 327At least one of screw type 328At least one of screw type 329At least one of screw type 329At least one of screw type 329At least one of endless type 329At least one of endless type 328At least one of endless type 328At least one of endless type 329At least one of endless type 329Docated on moving vehicle assistant located proximate to bottom of receptacle and displaceable generally parallel thereto 331.01Condition responsive 331.02Docated on moving vehicle 331.03Condition responsive 331.04Docated on moving vehicle assistant separable from 331.02Condition responsive 331.03Charge-supporting elements moving horizontally 331.04Charge-supporting elements moving vertically 331.05Docated on moving vertically 331.06Docated on moving vertically 331.07Charge-supporting elements moving vertically 331.07Charge-supporting elements moving vertically 331.07Docated on assistant and member for shielding its fixed end 331.05Docated on moving vertically 331.06Docated on moving vertically 331.07Docated on moving vertical axis 331.07Docated on moving vertical axis 331.07Docated on moving vertical axis 331.07Docated on moving vertically 331.07Docated on moving vertical axis 331.07				assistant involves driven,
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305Including at least one discharge assistant of the compound motion type  306Having compound motion assistant located proximate to bottom of receptacle and displaceable generally parallel thereto  307Condition responsive  308Assistant separable from receptacle and receptacle and receptacle and receptacle and receptacle and receptacle and receptacle  309Pivotably displaceable assistant and member for shielding its fixed end  310Comprising screw conveyor  311Including means for loosening packed material  312Having receptacle-reacting element of displaceable movement drive means located on conveyor  329Located on moving vehicle moving vehicle  331.01 MOVABLE RACK HAVING SUPERPOSED, CHARGE-SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING  ELEMENTS  331.02Charge-supporting elements moving horizontallyCharge-supporting elements moving verticallyCharge-supporting elements wertical axis  331.05Rack as a unit rotating about vertical axis  331.06Having receptacle-reacting elements of displaceable-movement drive means located on conveyor  331.08Charging or discharging means	204			
discharge assistant of the compound motion type  306 Having compound motion assistant located proximate to bottom of receptacle and displaceable generally parallel thereto  307 Condition responsive  308 Assistant separable from receptacle and receptacle and displaceable generally parallel thereto  311.02 Pivotably displaceable assistant and member for shielding its fixed end  310  310  310  310  310  310  310  31			_	
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bottom of receptacle and displaceable generally parallel thereto  307Condition responsive  308Assistant separable from receptacle  309Pivotably displaceable shielding its fixed end shielding its fixed end loosening packed material loosening packed material loosening packed material loosening packed movement drive means located on conveyor  310 conveyor  311 Charge-supporting elements moving horizontally loosening packed material loosening loosening located loosening packed material loosening located located loosening located located loosening located loc	306			
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element of displaceable- discharging of charge- movement drive means located supporting elements on conveyor 331.08Charging or discharging means	312			
movement drive means located supporting elements on conveyor 331.08Charging or discharging means			-	
on conveyor 331.08Charging or discharging means				
		on conveyor	331.08	
				is a pusher

331.09	Charging or discharging means is a conveyor	338	WHEELED, LOAD-TRANSPORTING TYPE VEHICLE UTILIZES ITS
331.1	Charging or discharging means is a reciprocating arm		UNINTERRUPTED, FORWARD MOTION TO CAUSE AN EXTERNALLY
331.11	Charging or discharging means having elevating means to		SUPPORTED LOAD TO BE TRANSFERRED TO IT
	<pre>present load at a predetermined level</pre>	339	WHEELED, LOAD-TRANSPORTING TYPE VEHICLES FORMING A TRAIN, AND
331.12 331.13	.Rack formed by rotatable screws .Rack moved by conveyor relative		LOADING OR UNLOADING MEANS THEREFOR, LOCATED AT LEAST IN PART THEREON
331.14	to charging or discharging means .Rack moved vertically by	340	WHEELED, LOAD-TRANSPORTING TYPE VEHICLES AND MEANS FOR
331.15	elevating meansHaving means for detecting		TRANSFERRING, OR ENABLING TRANSFER OF, LOAD FROM ONE
331.16	presence of article on rackCharging or discharging means	341	VEHICLE TO ANOTHER .By additional load-supporting
331.17	is a pusherCharging or discharging means		vehicle for moving with load from one load-transporting
331.18	is a conveyor Charging or discharging means	342	type vehicle to the otherAdditional vehicle comprises overhead traversing hoist
332	is a reciprocating arm RECEPTACLE HAVING CHARGING OR	343	.With means on each vehicle cooperating to effect, or
	DISCHARGING MEANS AND ADAPTED FOR RELOCATION FROM ONE TO ANOTHER OF A PLURALITY OF	344	facilitate, transfer of load .With driven load engaging
333	SITES OF INTERIM USE LOADING OR UNLOADING A RAILWAY		device, supported at least in part externally of the
	CAR BY UTILIZING THE TRACTOR OF A TRACTOR TRAILER, LOAD-	245	vehicles, for moving load therebetween
	TRANSPORTING TYPE VEHICLE TO MANEUVER THE TRAILER, OR A	345 346	<pre>.Means is confined to one of the   vehiclesMeans comprises tiltable load-</pre>
224	PART THEREOF, ONTO OR OFF THE CAR	347	supporting portionMeans comprises elevatable
334	MOVING, WHEELED, LOAD- TRANSPORTING TYPE VEHICLE AND LOADING OR UNLOADING DEVICE THEREFOR, SUPPORTED AT LEAST	317	load-supporting portion traveling in path including vertical, rectilinear movement
	IN PART INDEPENDENTLY OF THE VEHICLE AND TRAVELING	348	Having portion suspended from vehicle on overhead way
	THEREWITH DURING TRANSFER OF LOAD THEREBETWEEN	349	WHEELED, LOAD-TRANSPORTING TYPE VEHICLE HAVING DRIVEN MEANS
335	.Loading device having capability for controlling direction of output therefrom		THEREON FOR REPOSITIONING LOAD SUPPORTING PORTION OF VEHICLE TO CAUSE OR FACILITATE
336	.Suspendedly supported device		MOVEMENT OF LOAD TO OR FROM AN EXTERNAL COOPERATING MEANS
337	WHEELED, LOAD-TRANSPORTING TYPE VEHICLE UTILIZES ITS UNINTERRUPTED, FORWARD MOTION	350	.Load-supporting portion pivotable about horizontal
	TO CAUSE AN EXTERNAL, LOAD- ENGAGING STRUCTURE TO REMOVE ITS LOAD	351	axis .Cooperating means comprises or includes a conveyor
	<b>_</b>		4 -

352	WHEELED, LOAD-TRANSPORTING TYPE VEHICLE HAVING DRIVEN MEANS THEREON FOR ENGAGING AND	370	With nonaligned paths for approach and departure of vehicle
	MOVING LOAD HORIZONTALLY, OR WITH HORIZONTAL COMPONENT, TO OR FROM AN EXTERNAL COOPERATING MEANS	371	Axis of pivot or tilt of structure parallels longitudinal axis of vehicle thereon
353	.Cooperating means comprises or includes a conveyor	372	With movable element to clamp vehicle to structure
354	WHEELED, LOAD-TRANSPORTING TYPE VEHICLE AND EXTERNAL MEANS FOR SUPPORTING VEHICLE IN TOTO AND REORIENTING IT INTO LOAD-	373	LOAD-TRANSPORTING TYPE VEHICLE AND EXTERNAL MEANS COOPERATING IN THE LOADING OR UNLOADING THEREOF
	RELEASING ATTITUDE	374	.Means decelerates moving,
355 356	.With driven carrier for receiving released loadEndless-type conveyor		wheeled vehicle, load continues to move and leaves vehicle
357	.Vehicle of rail-guided type and	375	.Means agitates, shakes, or
331	track section having rails configured to tilt or invert vehicle as result of moving	373	vibrates wheeled vehicle or load therein to loosen load for departure from vehicle
	thereonto or progressing therealong	376	.Involving movement of load by gravity from wheeled vehicle
358	<pre>.Vehicle-holding member rollable   along underlying support   (i.e., axis of pivot of   vehicle travels laterally)</pre>	377	Means initiates unloading of vehicle of type having load body, or other load holding means, suspended therefrom
359	.Vehicle-holding framework	378	Bottom unloading body
	rotatable about fixed axis passing through framework and parallel to longitudinal axis of vehicle	379	Bucketlike body having horizontal, reciprocable movement, and flexible strand means for driving it in at
360	Including movable element to clamp vehicle to framework	380	least one directionFlexible strand means serves
361	With rotation responsive moving means		also as initiating means
362	.Pivotably movable structure, at	381	Tilting body
302	least initially in underlying relation to vehicle	382	About axis parallel to direction of vehicle travel
363	With means to agitate vehicle or its load	383	Means cooperates with motion of vehicle to reorient load body, relative to wheels, into load
364	With means for shifting axis of pivot or tilt of structure in vertical direction	384	releasing attitudeBy pivoting body about axis
365	With means to affect exit of load from vehicle	385	parallel to longitudinal axis of vehicle to unload from sideMeans comprises driven device
366	Axis of pivot parallels longitudinal axis of vehicle	303	for raising one end of vehicle upwardly relative to other end
367	With means to retard or stop vehicle approaching structure	386	thereofMeans comprises driven device
368	With means to guide departing load toward vehicle exit	-	for engaging and moving pivotable load body relative
369	With means to operate vehicle- mounted closure member		to remainder of vehicle

387	Means comprises device or	404	.For emptying contents thereof
	structure for cooperating with motion of vehicle to initiate relocation of body component	405	<pre>into portable receiving meansBy inverting both receptacle and receiving means in order</pre>
	(e.g., floor or floor section, gate, etc.) thereof		to transfer contents from one to other
388	Component comprises oppositely swinging, operatively	406	Having receiving means mounted on wheeled vehicle
	interconnected gates	407	With closure for receiving
389	.Means comprises structure for cooperating with a maneuvering, wheeled vehicle		<pre>means and receptacle- responsive operating means for closure</pre>
	to engage and acquire a load	408	Device includes vertically
	therefrom or to give up a load		swinging arm and receptacle
390	thereto .Of driven type, for unloading a wheeled vehicle	400	support pivotably attached thereto
391	Including load raising or	409	Device includes track-guided, receptacle-supporting carrier
	lowering device	410	Device includes haulage cable
392	Having means for also moving	411	.With container opening means
	load laterally	412	Rupturing or cutting type
393	<pre>With flexible, load- underlying element or surface</pre>	413	.Successive dumping from conveyed stack
394	With bucket or scoop-type	414	.With gate or closure-type
205	holder		discharge control means
395	Including load pushing or	415	.With jarring means
396	<pre>pulling deviceWith additional means for</pre>	416.01	.Nongravity type
390	aligning vehicle and an external load support	416.02	Changes spacing between articles
397	.Means comprises repositionable	416.03	Horizontal movement of receptacle contents
	supporting and/or guiding	416.04	Ejector
	structure (e.g., chute, etc.) for conducting load moving by	416.05	Receptacle moved on conveyor
	gravity to a wheeled vehicle	416.06	past emptying device
398	.Power-driven conveyor for loading a wheeled vehicle	416.06	Receptacle unloaded while in motion
399	.Raising or lowering device of	416.07	Articles removed in layers
333	driven type for loading a	416.08	Receptacle has spaced article
	wheeled vehicle	416.09	supports Ejector
400	.Pushing or pulling device for	416.1	Article support deformed
	loading a wheeled vehicle by		during load ejection
	exerting a generally horizontal force on load	416.11	Article lifted from receptacle
401	.Means serves to align wheeled vehicle and load receiving or		and subsequently pushed horizontally
	relinquishing structure	416.12	Receptacle lowered onto
402	.Means comprises stationary guide or fixed anchor for		support to eject article therefrom
	cooperating with loading or unloading means located, at	418	Orienting endless, roller, or gravity conveyor
	least in part, on wheeled	419	.Rotary cradle
	vehicle	420	Nonfixed pivot
403	DEVICE FOR EMPTYING PORTABLE	421	Oscillated
	RECEPTACLE	422	.Elevator type
		423	Differentially operated cables

424 425	Coacting catch or support .Upending (e.g., rocking or	462	VEHICLE ATTACHED AUXILIARY CARRIERS
123	tilting about end, etc.)	463	.For rim, tire, or wheel
799	APPARATUS FOR POSITIONING PLURAL	464	Plural
, , , ,	ORDERLY ARTICLES ONTO PALLET	465	Movement about spaced pivot
426	WHEEL AND WHEEL-TYPE ARTICLE	103	axes
120	HANDLER AND TRANSPORTER	466	Simple arcuate or rectilinear
427	.Elevator-type engaging means		movement
428	.Vertically swinging article	467	SELF-LOADING OR UNLOADING
	engager		VEHICLES
429	.Opposed horizontally	468	.With load-receiving portion
	reciprocable engaging elements		comprising horizontally
430	.Ramp-type truck		disposed, rotatable cylinder
431	ARTICLE ENGAGED BETWEEN ENDS FOR	469	.With load-receiving portion, or
	ROTATION AND ADVANCEMENT		significant section thereof,
432	.Driven, canted roll or ring		pivotable relative to
433	ARTICLE ROTATOR, ROLLER TYPE		horizontal
434	MOTION OR DRAFT RESPONSIVE LOAD	470	Having axis of pivot parallel
	HANDLER AND TRANSPORTER		to longitudinal axis of
435	.Movably connected vehicle		vehicle for side loading or
	sections (e.g., articulated,		unloading
	etc.)	471	Elevatable type
436	Vertically swinging	472	Discharge gate-carried loading
437	.Ground engageable means		means
438	Lifting leg type	473	Interrelated movements or
439	Wheel operated		drives for load body and
440	Locked to wheel	474	loading means
441	Elevator type	474	By adjustably attaching element
442	Vertically swinging support		of running gear (e.g., wheel, axle, etc.) to load-receiving
443	Cable and drum actuated		portion, or support member
444	TILTING VEHICLE-TYPE HANDLER		(e.g., chassis, frame, etc.)
	(I.E., PORTABLE GRAPPLE)		therefor, to enable relative
445	.Article actuated engaging means		movement therebetween
446	.Separable load rack	475	Element shiftable linearly
447	.Successive engaging means		toward front or rear of
448	.With band-type engager		vehicle
449	.Flexible strand attached load	476	Pivotably
450	gripper	477	Load-receiving portion also
450	.Opposed movable jaw grippers		shiftable longitudinally
451	Slidable	478	With driven means to move load
452	Toggle-type operator		relative to portion
453	.Single movable jaw gripper	479	Means serves also to shift
454 455	With operating means		portion in at least one
455 456	Adjustable		direction
456 457	Slidable	480	Load-receiving portion includes
457	.Rigid-type grapple engaging		means which extends
458	means (e.g., hooks, etc.)  OPPOSED SHELF-TYPE ELEVATOR AND		longitudinally therefrom to
430	TRANSPORTER	401	form ramp when portion pivots
459	.Load bridging vehicle	481	Trailer-type vehicle and
459 460	LOAD BRIDGING VEHICLE		<pre>adjustable or removable tow- engaging structure associated</pre>
460 461	.Removable transverse load		therewith enabling lowering of
101	support		forward end of vehicle for
	Darbor c		loading

482	Trailer-type vehicle having	505	Pivotally
	load-receiving portion	506	.Winch and idler-pulley-
	pivotable relative to at least		traversing haulage cable for
	one other component of vehicle		ejecting load from vehicle
483	About joint or other	507	.Conveyor
	connection in structure (e.g.,	508	With worker support
	drawbar, frame, etc.) normally	509	Comprising load-engaging
	extending linearly, or		element reciprocably movable
	planarly, from tow-engaging		parallel to generally
	end of vehicle to axis of		horizontal load-supporting
	wheels of vehicle, and		component of vehicle for
484	relative to said endAbout axis located between or		ejecting load therefrom
404		510	Three-dimensional load-
	adjacent to wheel sets of		receiving portion includes
	<pre>vehicle having plural, tandemly arranged sets of rear</pre>		movable load-underlying
	wheels, and relative to tow-		surface, and element comprises
	engaging end of vehicle		upright member attached to
485	About axis of wheels of	г11	surface
403	vehicle having two wheels, and	511	Pusher moved by ram movable to
	relative to tow-engaging end		different positions along
	of vehicle	F10	load-supporting platform
486	With means to raise load above	512	Plural pushers on same vehicle
100	load-receiving portion for	513	Pusher guide means
	deposit thereon or therein	514	Pusher moved by flexible means
487	Including receptaclelike	515	Connected to winch
107	(e.g., bucket, scoop, etc.)	516	Connected to ram actuated by
	holder for load	E 1 E	fluid pressure
488	Comprising driven conveyor	517	Pusher moved by ram actuated
489	With driven conveyor to receive	F10	by fluid pressure
	load departing from pivoted	518	Power-driven with cooperating
	load-receiving portion	F10	handling means
490	Two wheel, manually propelled	519	With gate means
	vehicle pivotable about axis	520	Multiple gates
	of wheels (e.g., hand truck,	521	With movable upright plate
	etc.) and provided with	522	Laterally movable rigid
	attendant-operated, load-	E 0 2	platform type
	handling means	523	Shiftable or removable conveyor
491	With driven means to move load	FOF 1	unit
	relative to load-receiving	525.1	Reciprocating type
	portion	525.2	Compactor vehicle including
492	Including pusher element	F0F 2	compacting plate
493	Pivotably mounted element	525.3	Reverse-flow ejection
494	Including haulage cable	525.4	Sequentially acting
495	.Having elevating load body		compacting plates or with
496	With traversing hoist	F2F F	closure over compacting plate
497	With reciprocating conveyor	525.5	Compacting plate movable
	(e.g., ejector type, etc.)	FOF F1	along controlled arc
498	.Separable load rack	525.51	Including moving compacting
499	Conveyor operated	F2F F2	plate pivot
500	Cable operated	525.52	Plate pivot moves
501	.Successive handling means	E0E	rectilinearly
502	Power-driven conveyors	525.53	With pivot-effecting
503	Movably mounted		hydraulic cylinder carried on
504	Universally		pivot

525.54	Pivot carried by arm turning about fixed second pivot	545	<pre>Carrier comprises movable   component of load-receiving   portion (e.g., tailgate,</pre>
	-		= = = = = = = = = = = = = = = = = = = =
525.55	Sequentially acting	- 4 -	section of floor, etc.)
	compacting plates or with	546	Raising or lowering of load or
	closure over compacting plate		load holder includes
525.6	Rectilinearly reciprocating		curvilinear movement
	compacting plate	547	Pivotable, telescopic arm
525.7	Vibratory		imparts path of plural radii
525.8	Detachable vibrator	548	Unloader actuated by gravity-
525.9	Walking beam		influenced load
526	Screw type	549	Carrier or mover includes
527	Flexible conveyor type	0 17	means enabling additional
527			movement of a rectilinear
	Endless		nature in a direction other
529	Load-engaging roller or		than vertical
	rollerway	550	
530	With means for locking roller	550	Carrier or mover includes
	against rotation		means enabling additional
531	With separate means movable		movement about a vertical axis
	vertically between load	551	Load holder located relative
	supporting and retracted		to vehicle in such manner as
	positions		to accrue load during travel
532	Shiftably or removably		of vehicle
	supported on vehicle	552	Carrier or mover pivots about
533	Roller connected to support		axis parallel to longitudinal
333	pivotally mounted on vehicle		axis of vehicle
	base	553	Load holder or portion
534	Support pivotal about		thereof has additional axis of
234	horizontal axis		pivot relative to swinging
F2F			arm-type carrier or mover
535	Vertically shiftable	554	Load holder pivotable about
536	With means for preventing		lower edge of opening in end
	movement of load relative		of load-receiving portion
	thereto	555	With means to grasp load
537	Skidway	556	Carrier comprises movable
538	With haulage means (e.g.,	330	component of load-receiving
	cable, etc.)		portion
539	.Loading or unloading by other	557	<del>-</del>
	carrier or mover means, and		Tailgate
	the load movement thereof	558	Carrier movable to storage
540	Raising or lowering of load or		position beneath vehicle
	load holder includes vertical,	559	Loading by haulage cable
	rectilinear movement		imparting principally
541	And carrier or mover includes		horizontal movement to load or
	means enabling additional		load holder
	movement having horizontal	560	TRAVERSING HOIST TYPE
	component	561	.Traveling crane
542	Hoist having traversing	562	Switch system
342		563	.Tow truck type
E 4 2	(i.e., horizontal) movement	564	HOIST OR ELEVATOR AND ENDLESS OR
543	Having boom pivotable about		ROTARY CARRIER
<b>544</b>	a vertical axis	565	VERTICALLY SWINGING SHOVEL AND
544	Elevator with laterally	505	AUXILIARY CARRIER
	shiftable guides	566	
		200	.Vertically swinging shovel
			having an orbital path

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567	VERTICALLY SWINGING LOAD SUPPORT  AND ENDLESS OR ROTARY CARRIER	585	.Means includes a load-engaging
F.C.0			surface or element for pushing
568	.For handling bottles	F06	load from vehicle
569	VERTICALLY SWINGING LOAD SUPPORT	586	DEVICE OR ELEMENT ASSOCIATED WITH
<b>5 5 6 6</b>	AND HOIST OR DRAG LINE		THE HANDLING OR MOVING OF A
570	ENDLESS OR ROTARY CARRIER AND DRAG LINE SCOOP		CHARGE FOR A HEATING-TYPE CHAMBER
571	SKIDWAY WITH HOISTING ROPE	587	.Charge leveler
572	LOAD-TRANSPORTING TYPE VEHICLE TO	588	Of rotary type
314	BE LOADED OR UNLOADED, OR	589	LOAD SUPPORT HAS LINEAR VERTICAL
	EXTERNAL MEANS FOR THE LOADING	307	MOVEMENT AND ADDITIONAL
	OR UNLOADING, OR FOR		MOVEMENT FOR ALIGNING AND
	COOPERATING THEREWITH, OF SUCH		MOUNTING LOAD AT A SPECIFIC
	A VEHICLE		LOCATION
573	.Means includes driven carrier	590	.Additional movement is
373	for receiving a load from a		rotational
	vehicle at an unloading	591	GUIDED HOIST WITH LOAD-SUPPORTING
	station	371	GRAB MEANS MOVABLE
574	Endless apron-type conveyor		HORIZONTALLY BY MEANS WHICH
575	.Means comprises device for		SWINGS HORIZONTALLY OR MOVES
373	changing the attitude of a		LINEARLY
	vehicle, or its load body,	592	ELEVATOR OR HOIST AND LOADING OR
	relative to the horizontal for		UNLOADING MEANS THEREFOR
	unloading by gravity	593	.Mail
576	Framework for holding a	594	.Load lowering, automatic return
	vehicle, pivotable about fixed	595	.Inclined track
	axis through framework	596	Ditching type
	parallel to longitudinal axis	597	Pivoted track
	of vehicle	598	Tilting carrier
577	Pivotably movable structure for	599	Tilting track section
	supporting a vehicle in toto,	600	Running out from base
	positioned, at least	601	Return, buffer, or
	initially, in underlying		counterweight feature
	relation thereto	602	Return, buffer, or
578	With means for adapting		counterweight feature
	structure to accomodate more	603	Skeleton or fork
	than one length of vehicle	604	Outhaul feature
579	With fluid or mechanical	605	Carrier running out from base
	friction brake to regulate	606	.Magnet and grab
<b>500</b>	movement of structure	607	.Convertible attachment
580	With means for limiting	608	.Separable rack
	longitudinal movement of	609	.With external cooperating
E 0.1	vehicle on structure		movable feeding or discharging
581	Having axis of pivot parallel		means
	to longitudinal axis of	610	Elevator carrier movement
E00	vehicle		responsive
582	By raising one end of a vehicle	611	Vehicle handling
E02	relative to other end thereof	612	Loading means
583	Including a vertically	613	Flow control mechanism (i.e.,
E 0 /	swinging, lifting member		volume)
584	.Means comprises device or member	614	Trap chamber type
	for moving or causing movement of either a vehicle or a load	615	Movable to feeding position
	receiving or relinquishing		over carrier
	structure for an alignment	616	Valved carrier
	purpose		
	r roos		

617	Adjustably mounted discharge	648	Camming trackway
017	quide	649	Adjustable
618	.Grab	650	Yoke suspended carrier
619	Cantilevered type (e.g.,	651	Tethered type
	industrial truck, etc.)	652	Abutment or limit stop
620	Movable about horizontal axis	653	Swinging
621	Movable rigid jaw clamping	654	Engageable upon reversal or
	type		lowering of carrier
622	Horizontal support with	655	Cantilevered carrier
	coacting element or holddown	656	Carrier and quide supported
623	Multiple article or rack type		cooperating elements
624	Clamshell	657	.Valved
625	Guided	658	Cam or abutment operated
626	Suspended	659	.Comprising device on carrier to
627	Suction gripper type		move or carry load laterally
628	.Elevator wherein means comprises		thereto or therefrom
	guide mounted for relative	660	Device raises load relative to
	movement, and tiltable carrier		carrier prior to moving it
	thereon		laterally
629	Portable (e.g., vehicle-	661	Push-pull device
	mounted, etc.) elevator	662	.Comprising means enabling
630	.Elevator wherein means comprises		additional movement of carrier
	guide mounted for relative		or portion thereof relative to
	movement		its support
631	Portable (e.g., vehicle-	663	On portable (e.g., vehicle-
	mounted, etc.) elevator		mounted, etc.) elevator
632	Having one or more axes of	664	Carrier comprises spaced,
600	pivotable movement		elongated, horizontally
633	Including vertical axis		coplanar, load-supporting
634	Single axis, horizontal and		<pre>members, at least one being movable</pre>
625	fixed	665	Pivotable in horizontal plane
635	With fluid drive for movement thereabout	666	And otherwise movable
636		000	therein
030	And means for limiting the movement	667	Shiftable in horizontal plane
637	Having one or more axes of	007	perpendicularly to axis of
037	pivotable movement		elongation
638	Single axis, horizontal and	668	Carrier comprises spaced,
030	fixed		elongated, horizontally
639	.Tilting carrier		coplanar, load-supporting
640	With operator-controlled		members, at least one being
010	tilting means		movable
641	Portable (e.g., vehicle-	669	Pivotable in horizontal plane
	mounted, etc.) elevator	670	And otherwise movable therein
642	Tiltable about axis	671	Shiftable in horizontal plane
	perpendicular to direction of		perpendicularly to axis of
	travel of portable elevator		elongation
	(e.g., forwardly tiltable,	672	Carrier comprises swingable or
	etc.)		rotatable, load-underlying
643	Sectional platform type	683	surface
644	Valved	673	.Return, buffer, or counterweight
645	Latch release	671	feature
646	With carrier engaging cam	674	.Automatic stop
	means	675	COUNTING AIDS
647	Cantilevered carrier		

686		<b>500</b>	
676	ARTICLE SUPPORTED BY AIR AND	708	By hydraulic compensation
	MOVED BY MECHANICAL OR MANUAL MEANS	709	By tensioned flexible connector
677	FEED TABLES FOR SHEARING MACHINES	710	By linkage pivoting on base
678	LAND VEHICLE OR BOAT TILTING AND	0	support
	LIFTING DEVICES	711	Yoke mounted shovel or fork
679	VEHICLE WITH LOAD-RECEIVING	712	Linkage extensible for other
	PORTION AND MEANS FOR		tilting
	RELOCATING A LOAD THEREALONG	713	Swinging support mounted
	OR THEREWITHIN		linkage
680	VERTICALLY SWINGING LOAD SUPPORT	714	Induced by swing of swinging
681	.Track-supported rocker		support
682	Horizontally swinging	715	By extensible link between
683	.Cement mixer loader		load engager and swinging
684	.Coil handler		support
684.3	.Door remover	716	Holdable in different pitch
685	.Shovel or fork type		positions during loading
686	With means to facilitate	717	On unlatching from swinging
	attachment of boom to vehicle		support
687	Horizontally swinging	718	Extensible support
688	Vertically adjustable	719	Return, buffer, or
689	Trolley supported pivoted		counterweight feature
	handle	720	Spring
690	Reciprocating handle	721	Hay retainers
691	Link supported	722	Shovel, rake, handle, or boom
692	Tilting		structure
693	Single cable for crowding and	723	With means to facilitate
	hauling		attachment of shovel or rake
694	Handle pivoted to boom	<b></b>	to handle or boom
695	Adjustable horizontal swing	724	Handling device releasably
	axis	705	attached to bucket or rake
695.5	Linear cylinder	725	Means for ejecting load from
695.6	Flexible connector	726	shovel
695.7	Rack and pinion	726	Shovel forming members pivoted relative to each other to dump
695.8	Rotary motor		load
696	Guided	727	Handle body structure
697	Tilting	728	With rectilinear translation
698	Including indicator	729	.Grab
699	Control means responsive to sensed condition	730	Programmable or condition
700		, 50	responsive means controls grab
700	To maintain pitch during swinging		operation
701	To stop tilting at selected	731	With auxiliary support for load
701	angle	732	Grab movable relative to its
702	Overshot type		supporting arm
702	Swinging member attached to	733	Grab orientation maintained
703	rear mounted draft member		during supporting arm
704	Including load ejector,		manipulation
, 0 -	striker, or retainer	734	Grab suspended to swing
705	Laterally tiltable or		freely
	shiftable shovel or fork	735	Grab has swinging movement in
706	During swinging to stabilize		plural planes
	pitch	736	Movable grab support has
707	On link mounted swinging		plurality of grabs attached
	support		thereto

737	Grab is a suction or magnetic article engaging means	749.3	<pre>.Including a detector for altering load path (e.g.,</pre>
738	Grab supported and moved by a	T40 4	stop, redirect)
<b>720</b>	pivotably mounted member	749.4	.Multiple loads, rotatable into
739	Grab has pivoted jaw member		<pre>various positions (e.g., indexing)</pre>
740	With fixed jaw member	749.5	<u> </u>
741	Grab has reciprocating jaw member	749.5	.Multiple loads, having means spacing one load from another load
742	.Nonfixed pivot	751.1	
743	.Tilting carrier	752.1	.Having gripper means
744.1	HORIZONTALLY SWINGING LOAD	752.1	Pivoted jaw type
T44 0	SUPPORT	749.6	Fivoted jaw type .Including aligning structure
744.2	.Swinging about pivot	749.0	(e.g., rollers and rails,
744.3	And moving vertically		dovetail joint, rod and
744.4	Moving pivot		channel)
744.5	Pivot swinging about second	754	ARTICLE REORIENTING DEVICE
<b>544</b> 6	pivot	755	.Article reoriented by contact
744.6	And moving load support	733	with fluid means
E44 E	radially with respect to pivot	756	Article reoriented by flexible
744.7	And vertically reorienting load	750	sling means
744.8	supportWith means to actuate load	757	.Article frictionally engaged and
744.0			rotated by relatively movable
745.1	gripper CYLINDRICAL BAR HANDLING DEVICE		means (e.g., disc, endless
745.1			belt, etc.)
745.2	.Vertical cylindrical bar .Heat exchanger tube bundle	758	.Article inverting means (i.e.,
743.3	handling device		180 degree turnover)
745.4	.Pipe laying	759	Plural, driven turning means
745.5	Vehicle having supporting wheel		coact sequentially to invert
713.3	or wheel substitute		single article
745.6	Side boom supported hoist line	760	Article slidably traverses
745.7	.Sequentially acting, diverse		sloping surfaces on a
, 13. ,	handling devices		plurality of pivotally mounted
745.8	Changing orientation of		turning means
, 10.0	cylindrical bar	761	Inverter has plural means for
745.9	Including ramp and elevator	7.0	receiving articles
	means	762	Having article inserting or
746.1	Oscillating or reciprocating	E.C.	discharging means
	elevator	763	Having article gripping means
746.2	Oscillating	764	Encircling means inverts
746.3	Including means to rotate or	765	article
	allow rotation of bar about	765	Having article inserting or
	its axis	766	discharging means
746.4	.Including ramp and retractable	766	Having securing means movable
	stop or ejector		into engagement with the article
746.5	.Engaging interior surface of	767	
	pipe	707	Encircling means moves about its transverse axis
746.6	.Comprising walking beam	768	Article turned about one end
746.7	.Comprising roller or endless	700	supported by a fixed or
	belt		rotatable abutment or by a
746.8	.Comprising carriage		surface frictionally retarding
749.1	LOAD CARRIED ALONG A HORIZONTAL		movement of the supported end
	LINEAR PATH (E.G., PICK AND	769	Article turned about a
	PLACE TYPE)		rotatable abutment
749.2	.Carried via magnetic floating		

770	Article turned about a fixed abutment means	804	.Of material charging or discharging of a chamber of a
771	Including coacting opposed movable arms		type utilized for a heating function
772	Article moved about perpendicular axes	805	.Of moving material between zones having different pressures and
773	Article received at one point and discharged at a different	806	<pre>inhibiting change in pressure   gradient therebetween .0f charging load-holding or -</pre>
554	point	000	supporting element from source
774	.Plural article turning members coact sequentially to reorient single article		and transporting element to working, treating, or
775	Article deposited on stationary		inspecting station
	supporting surface	807	.Of charging or discharging
	intermediate sequential		plural static structures for
	turning members		supporting discrete loads and
776	.Arm for orienting article is		utilizing charging or
770	swingable about its transverse		discharging means therefor
	axis and is rotatable about	808	.Of charging or discharging, or
	its longitudinal axis		facilitating charging or
777	.Roller means circumferentially		discharging of static
7 7 7	engages and supports orienter		receptacle
	for rotation thereon	809	.Of loading or unloading load-
778	.Article support means rockable		transporting type vehicle and
770	on fixed surface		external means cooperating in
779	Article support means rotates		loading or unloading thereof
113	about a shiftable pivot point	810	.Of emptying portable receptacle
780		811	Nongravity type
700	.Fixed member provides support for article reoriented while	812	.Of charging or discharging self-
	in contact therewith	813	loading or unloading vehicle
781	.Article reoriented while fully		With conveyor
	supported by stationary supporting surface	814	.Of loading or unloading elevator or hoist and including loading
782	.Article supporting carriage		or unloading means therefor
	moved over fixed guideway to reorient article	815	.Including vertically swinging load support
783	.Orienter has article gripping	816	.Of reorienting article
	means	787	MISCELLANEOUS
784	.Orienter having article-		
	supporting surface movable		
	relative to article		
785	LOAD ENGAGING STRUCTURE OF	CROSS-	-REFERENCE ART COLLECTIONS
	ELEVATOR OR HOIST DEVICE WITH		
	LOAD HANDLING FEATURE	922	ASSOCIATED WITH FORMING OR
800	PROCESS		DISPERSING GROUPS OF
801	.Of moving intersupporting		INTERSUPPORTING ARTICLES
	articles into, within, or from		(E.G., STACKING PATTERNS,
	freestanding, orderly layered,		ETC.)
	or mutually stabilizing	903	.With article-supporting fluid
	orderly group		cushion
802	Of stacking	923	.Including support for group
803	.Of loading or unloading marine	924	Vertically shiftable
	system	925	Shifted by change in weight
			thereon

926	Shifted by article responsive means	939 .Including wafer charging or discharging means for vacuum
927	.Including means for supplying pallet or separator to group	chamber 940 .Wafer cassette transporting
928	Recirculates emptied pallet or separator	941 .Includes means for gripping wafer
929	.Including means for collecting emptied pallet or separator	
930	.Manual step utilized	
931	Bricks	FOREIGN ART COLLECTIONS
932	.Audio or video cassettes	POREIGN ART CONDECTIONS
933	.Group formed or dispensed by reversible apparatus	FOR 000 CLASS-RELATED FOREIGN DOCUMENTS
934	.Nonconforming article diverted	Any foreign patents or non-patent litera-
900	.Adjust to handle articles or groups of different sizes	ture from subclasses that have been reclassified have been transferred
901	.Including article counter	directly to FOR Collections listed below.
902	.Including control for pattern of group	These Collections contain ONLY foreign patents or non-patent literature. The par-
904	.With means to apply adhesive to article	enthetical references in the Collection titles refer to the abolished subclasses
905	.Having geneva drive for apparatus	from which these Collections were derived.
906	.With article flap deflector	
907	.Including means pressing against	
	top or end of group	FOR 100 PROCESSES (414/786)
908	PERFORATED ARTICLE HANDLING	FOR 101 APPARATUS FOR CHARGING A LOAD
, , ,		
909	REMOTE CONTROL HANDLERS	HOLDING OR SUPPORTING ELEMENT
909 910	REMOTE CONTROL HANDLERS	HOLDING OR SUPPORTING ELEMENT FROM A SOURCE, AND MEANS FOR
910	HOLLOW CYLINDER HANDLERS	
910 911	HOLLOW CYLINDER HANDLERS ROLL HANDLERS	FROM A SOURCE, AND MEANS FOR
910	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A
910 911 912	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR
910 911 912 913	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222) FOR 102 .Supply source includes member
910 911 912	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)
910 911 912 913 914	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)
910 911 912 913 914 915	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute
910 911 912 913 914 915 916	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)
910 911 912 913 914 915 916 917	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting
910 911 912 913 914 915 916	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping
910 911 912 913 914 915 916 917	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)
910 911 912 913 914 915 916 917	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)
910 911 912 913 914 915 916 917 918	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED;
910 911 912 913 914 915 916 917 918	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR
910 911 912 913 914 915 916 917 918	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE
910 911 912 913 914 915 916 917 918	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)
910 911 912 913 914 915 916 917 918	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT HANDICAPPED PERSON HANDLING ASSOCIATED WITH SEMICONDUCTOR	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT HANDICAPPED PERSON HANDLING ASSOCIATED WITH SEMICONDUCTOR WAFER HANDLING	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT HANDICAPPED PERSON HANDLING ASSOCIATED WITH SEMICONDUCTOR WAFER HANDLING Including wafer orienting means Including means for charging or	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT HANDICAPPED PERSON HANDLING ASSOCIATED WITH SEMICONDUCTOR WAFER HANDLING Including wafer orienting means Including means for charging or discharging wafer cassette	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)
910 911 912 913 914 915 916 917 918 919	HOLLOW CYLINDER HANDLERS ROLL HANDLERS COMBINED OR CONVERTIBLE IMPLEMENTS HANDLERS WITH SPRING DEVICES HANDLING VEHICLES WITH OVERHEAD GUARD FOR OPERATOR HANDLER-TYPE TOYS SHAFT MUCKING MACHINES HANDLERS UTILIZING PARALLEL LINKS TRANSMISSION-LINE GUIDE FOR A SHIFTABLE HANDLER VEHICLE-CARRIED STORAGE MEMBER (E.G., PORTABLE SILO, ETC.) AND MEANS FOR ERECTING MEMBER FROM ATTITUDE DURING TRANSPORT TO POSITION OF INTENDED USE HANDLING DEVICE ON TRACTOR UNIT HANDICAPPED PERSON HANDLING ASSOCIATED WITH SEMICONDUCTOR WAFER HANDLING Including wafer orienting means Including means for charging or	FROM A SOURCE, AND MEANS FOR TRANSPORTING THE ELEMENT TO A WORKING, TREATING, OR INSPECTING STATION (414/222)  FOR 102 .Supply source includes member capable of 360 degree revolution (414/223)  FOR 103 .Supply source includes a chute (414/224)  FOR 104 .Load holding or supporting element includes gripping means (414/225)  FOR 105Including pivoted jaw (414/226)  FOR 106 MOVABLE RACK HAVING SUPERPOSED; CHARGE SUPPORTING ELEMENTS, AND EXTERNAL MEANS FOR CHARGING OR DISCHARGING THE ELEMENTS (414/331)  FOR 107 .Nongravity type (414/416)